

# ***Conservation Biology***

## **Style Guide for Authors**

### **Word count**

*Conservation Biology* tries to balance the depth of each article with the number of articles that can be published. Manuscripts must not exceed the following word counts **even if reviewers have asked for additional material**. The number of words includes all text from the Abstract through Literature Cited; it does not include tables or figure legends or text in the body of tables. The Abstract should not exceed 300 words. Do not include an abstract with Letters, Comments, or Diversity pieces.

Contributed Papers: 6000  
Research Notes: 3000  
Reviews: 7500  
Essays: 6000  
Conservation Methods: 6000  
Conservation Practice and Policy: 5000  
Comments: 2000  
Diversity: 2000  
Letters: 1000

More information on these categories and the types of papers published in *Conservation Biology* is available from [http://onlinelibrary.wiley.com/journal/10.1111/\(ISSN\)1523-1739/homepage/ForAuthors.html](http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1523-1739/homepage/ForAuthors.html).

### **Number of tables and figures**

Include no more than 1 supporting element (i.e., table or figure) for every 4 pages of text (from the Abstract through the Literature Cited). If a table or figure has only a few data points, incorporate the data in the text.

### **Appendices and supporting information**

We rarely allow appendices in the print version of the journal. Supplementary materials typically should be provided as online Supporting Information (see below for further information).

### **Section headings and order of sections**

Contributed Papers, Research Notes, and Conservation Methods papers should contain the following sections in the following order: Abstract, Introduction, Methods, Results, Discussion, Supporting Information (paragraph describing online appendices if there are any), Literature Cited, tables, figure-legend page, and figures with legends. *Do not combine sections (e.g., Results and Discussion)*. The Acknowledgments section will be added to the body of the paper after the manuscript has been accepted. Do not number section headings or subheadings. Do not include a Conclusion section (conclusions are part of the Discussion).

## **Title**

Most people will decide whether to read a paper solely on the basis of its title. Indexing and abstracting services and internet search engines also depend heavily on words in the title. And, researchers search for particular topics and then read the titles. If your title does not reflect the contents of your paper well or if the meaning of your title is not immediately clear, your paper will not be read. Titles should be clear and concise. Do NOT use 1. hanging titles (those with a colon, dash, or sometimes a comma), 2. titles that are complete sentences, 3. headline-like titles, 4. interrogative titles, 5. titles that reference colloquialisms or popular culture, or 6. titles that contain jargon that will not be understood by our international and interdisciplinary conservation audience.

The problem with titles that are complete sentences is that they tend to create dogma (e.g., Wind Energy Development Does Not Affect Nesting Ecology of a Grassland Bird). Scientific knowledge is constantly evolving; thus, what is considered true currently may be questioned and proven inaccurate in the future. It does not follow that because science is evolving interrogative titles are thus a good idea. Interrogatives make poor titles because they are vague, disguise the answer to the question, and do not provide particular motivation to read the article. Hanging titles are overused and can almost always be shortened to a title that is more effective and eye-catching without being sensational. There is evidence that articles with short titles are cited more often than articles with long titles.

## **Abstract**

At the top of the abstract page provide the title of the paper. The Abstract should summarize the Introduction, Methods, Results, and Discussion in that order (i.e., it should be a miniversion of the paper). Key points from each of these sections should be identifiable within the Abstract. Do not include incomplete or uninformative descriptions (e.g., "A new method of analysis is described." or "We discuss how our approach promotes sustainable management of forest systems."). Do not state conclusions that are not supported by evidence reported in the abstract.

## **Keywords**

Include on the cover page 5-8 words or phrases that will be useful for indexing and literature searches. Do not use words in the title as keywords, and avoid general terms such as *conservation*.

## **Article impact statement**

In ≤140 characters (including spaces and punctuation), convey the paper's practical or policy importance. The statement may be a report of the primary result or theme if the practical or policy importance of the result is obvious. It should not be a reiterated or lengthened title or describe what is presented (e.g., "A method to x is presented."). It should not contain personal pronouns or statements resembling "X was examined."

## **Statement on human or animal subjects**

When reporting on studies that involve human participants or animal subjects, supply a statement in methods that specifies the ethical guidelines with which you complied. Include permit numbers, if applicable.

## **Acknowledgments**

Place the acknowledgment paragraph on the cover page of your manuscript. (Reviewers are not provided with a cover page.) Do not spell out first (given) names. Provide the first initial of the first name, even if the initial starts a sentence. Do not use titles (e.g., Dr. or Professor). Refer to authors of the manuscript by their initials only (e.g., “S.T.W. was supported by a grant from the Torrey Foundation.”).

## **Footnotes**

Do not use footnotes in the body of the manuscript.

## **Citations**

Do not cite work or data that have not been published or are not available. Include such work or data as online Supporting Information and cite it as such in the text. If the data are available in a publically accessible database, you may cite that database. Include databases in Literature Cited.

### **In-text citations**

In the body of the paper, order citations from oldest to newest and use author-year format.

In most cases, enclose citations in text in parentheses. “Populations in sagebrush have higher reproductive success than populations in cheatgrass (Byrd & Elder 2000).” is better than “According to Byrd and Elder (2000), populations in sagebrush . . .”

Use an ampersand (&) between author surnames when the citation is parenthetical: (Bird & Sanchez 2010).

When a citation is not parenthetical, use *and*: “Our results are consistent with the predictions of Wolf and Rhymer (2011).”

For citations with more than two authors, use *et al.*: (Hatchwell *et al.* 1996). Do not italicize *et al.*

List parenthetical citations chronologically (from oldest to most recent) and separate entries with a semicolon: (Zorenstein *et al.* 1991; Waddell & Fretwell 2001).

Separate the years with commas when citing multiple papers by the same author: (Cox *et al.* 1991, 1992; Chapman 2001).

“In press” means the cited paper has been accepted officially for publication. Provide the year of publication in the text (Bird 2015), and in Literature Cited provide the volume number and substitute “in press” for page numbers or DOI (Byrd *et al.* 2015. Effects of desertification on birds in the southwestern United States. *Conservation Biology* **29**: in press.).

Cite databases in text with an author-year format.

Software: capitalize the first letter only if the name of the program is a word (e.g., Partition, ArcInfo). If the name of the program is not a word, use all capital letters (e.g., SAS).

Do not use trademark symbols.

Ensure that all references cited in text are listed in Literature Cited and vice versa.

Do not use “in. lit.” citations. Provide the original citations.

### **Unpublished information**

To further transparency and reproducibility, avoid citations of unpublished data and phrases such as *data not shown*. Provide data in online Supporting Information (cite as Supporting Information in text) or in a publically accessible database (cite in text and in Literature Cited).

### **Literature Cited section**

Provide the full names of all journal titles. Do not italicize titles.

If there are more than 10 authors, use et al. (Howard G, et al.) instead of listing the names of all authors.

Personal communications should not be included in Literature Cited.

Proceedings and abstracts from conferences may be cited only if they have a publisher and the location of the publisher (or the organization from which the document may be obtained) can be provided. The location of the meeting is rarely the location of the sponsoring organization.

### *Example Citations*

#### Journal articles:

Christensen ND, Eu J, Hebbble W. 2003. Changing ecology of cranberry bogs. *Ecology* **59**:1147–1167, 1178–1187.

Reed, FM. 2001. Title of paper. *Journal* **13**(supplement 1):172–180.

#### Online journal articles:

Hunstanton V. 2008. Effects of deep-sea injection of carbon dioxide. *PLOS Biology*  
DOI: 10.1371/journal.pbio.1001222.

Fernandez-Gimenez M, Ballard H, Sturtevant V. 2008. Adaptive management in community-based monitoring. *Ecology and Society* **13** DOI: 10.5757/ES-10034-230409.

No access dates are needed for citations of online journals.

#### Edited books:

Cran B, Boy C, Shi L. 1911. Native forest birds of Guam. Pages 4–8 in Wu T, Lee L, editors. *Flora and fauna of Guam*. 2<sup>nd</sup> edition. Tell Books, Sydney.

#### Reports:

Barnes J, Craig S. 2003. Conservation status of riparian areas in southeastern Oregon. General technical report N-24. U.S. Fish and Wildlife Service, Portland, Oregon.

Internet sources other than journals:

Include the name of the organization hosting the website, the city in which they are located, and access date (month year).

Carne A. 2003. Ranges of endangered Colombian birds. BirdLife International, Cambridge. Available from <http://www.BLI.org/pub2/birdranges> (accessed March 2014).

Databases:

IUCN (International Union for the Conservation of Nature), UN Environment Programme (UNEP). 2017. World database on protected areas. IUCN, Gland, Switzerland, UNEP, Paris. Available from [www.protectedplanet.net](http://www.protectedplanet.net) (accessed December 2017).

In-press manuscripts:

Officially accepted manuscripts may be cited as in press in Literature Cited: Stevens J Trainer C. 2019. ...on marine ecosystems. *Conservation Biology* 33: in press. In text and in Literature Cited, provide year of publication (e.g., in text use Stevens & Trainer 2019).

## Supporting Elements (Tables, Figures, Online Appendices)

### Content

**A reader should be able to interpret tables and figures without referring to the text and having read only the abstract.** Tables and figures should be self-explanatory and supplement rather than duplicate information in the text. Consequently, abbreviations and terms must be defined in the figure legend or in the table caption or footnotes. Common statistical notations need not be defined (e.g., CI, SD, SE). Use the same terminology in supporting elements and in the text. Do not present large amounts of data in tables. **Text boxes are not allowed.**

### Citation in text

Provide a summary or generalization of results and cite supporting elements parenthetically: “Models for species abundance were significant and explained 78% to 92% of variability (Table 2).” Do not report results as, for example, “Table 2 shows the outcome of models of species abundance.” Abbreviate (“Fig.,” not “Figure”) unless *figure* is the first word in a sentence.

### Tables

Legends should be 1 sentence long. Use the legend to describe the contents of the table as it relates to the topic of the manuscript. A list of the table’s columns or row headings is not an informative table legend. Use footnotes to provide needed explanations of row and column headings, to provide more information about specific data, and to define terms.

Information too general: “Results of analysis of variance.”

Too much information: “Anti-Candida, -leishmania, and -tumor activity of extracts from 11 species of sea cucumber. NA indicates no activity ( $IC_{50} \geq 500 \mu\text{g/mL}$  against *Candida* and leishmania,  $IC_{50} \geq 80 \mu\text{g/mL}$  against LoVo cell line). The \* denotes that these

activities are significantly different from those obtained from extracts isolated from the same species taken from the southern region.”

Define abbreviations in a footnote even if they are already defined in the text.

If there is only one footnote, use an asterisk (\*). If there is more than one footnote, use letters (<sup>a</sup>, <sup>b</sup>, <sup>c</sup>). Order footnotes alphabetically from left to right and from top to bottom.

Do not use bold or italic type.

Do not use grid lines.

Unless an entry is a complete sentence or a proper noun, capitalize only the first word of the first entry in a row and do not use periods.

Do not split tables into separate sections (e.g., Table 1a and Table 1b). Make separate tables (Table 1, Table 2) or combine data under the same columns or rows.

Use indentation to set off secondary (or tertiary) entries within a column (see example below) and hanging indents for entries in tables that are primarily text.

Table 1. Logistic-regression models built with . . . <sup>a</sup>

Variable	Symbol	<i>p</i>	df
General model <sup>b</sup>	<i>f<sub>g</sub></i>	0.0015	3
landscape ruggedness	rug	0.0113	
forest cover (%)	bosque	0.0085	
Human model			
human population	pob1		
. . .			

<sup>a</sup>Significance level of coefficients . . .

<sup>b</sup>Next-most parsimonious models at . . .

## Figures

Figures must be of sufficient quality and resolution to remain clear at 60% reduction. Before publication, you will be required to supply figures in tif, eps, or pdf format. Resolution should be at least 300 dots per inch (dpi); 600 dpi is preferable for figures with lettering.

We encourage use of a serif type face on maps and graphs.

For guidance on best practices in graphic design, refer to the following link used with permission from *Oryx* - The International Journal of Conservation and Fauna & Flora International: <http://scalar.usc.edu/works/graphics-for-conservation/index>.

The legends for all figures should be grouped on a page that precedes the figures, and include a figure's legend below the figure itself.

### *Color figures*

*Conservation Biology* cannot waive charges for printing of color figures (\$700/page). We discourage the use of color because in some countries download speeds are slow and gray-scale photocopies of articles are common. You may have color figures in the online version and gray-scale figures in print for no charge. However, reference to color cannot be made in the figure legend or in the text, and elements in the gray-scale version must be distinguishable. Supply separate files for color and gray-scale figures.

### *Maps*

Scale bars and compass direction must be provided. Author portrayals of borders or other jurisdictional boundaries do not imply support of those representations by the journal or the Society for Conservation Biology.

### *Graphs*

Label all axes and include units of measure in the label, for example, Number of species/km<sup>2</sup>, Basal area (m<sup>2</sup>/ha).

Capitalize the first letter of the axis labels: Years since burn, Burned area (%), Burned area (ha), Seed density (seeds/plot).

Include a key on the figure itself rather than describing shading or shapes in the figure legend.

Match typeface and type size among figures. On a graph, the type size of axis labels and units of measure should be similar.

If a figure has more than 1 panel, use lowercase letters to designate the parts: (a), (b), (c). Each panel must be referenced clearly in the figure legend by its letter.

If there are many digits in numbers or relatively long descriptions along the x-axis, orient entries at 45 or fewer degrees.

All numbers along an axis must have the same number of significant figures: 1.0, 2.5, 2.0 (not 1, 2.5, 2).

The label for the y-axis should be oriented vertically to the left of the units (reading from bottom to top), and numerals should be horizontally oriented.

Center the labels along both axes.

Do not enclose graphs in a rectangle.

Do not use color on a figure that will be published in gray scale.

### **Supporting Information (online appendices)**

Supporting Information (i.e., online appendices) should be cited in the text of the paper. Every piece is cited as Supporting Information, not by specific appendix number. Before Literature Cited, insert a supporting-information paragraph in the exact format shown below that provides a brief description of supporting-information elements. Regardless of material format (e.g., table, figure, text), every piece should be referred to as an Appendix (e.g., Appendix S1, Appendix S2, etc.) and not be labeled, for example, Table S2 or Fig. S1. Do not use author names in supporting information file labels.

### Supporting Information

XXX (Appendix S1), XXX (Appendix S2), and a XXX translation of the article (Appendix S3) are available online. The authors are solely responsible for the content and functionality of these materials. Queries (other than absence of the material) should be directed to the corresponding author.

## Language and Grammar

### Clear language

Our audience is broad and international. Clarity in language and syntax is important, especially for readers whose first language is not English. Avoid jargon and colloquialisms. If English is not your first language, we strongly recommend that you ask a native English speaker with experience in publishing scientific papers to proofread your manuscript.

### Terminology

Some common terms in conservation science have multiple meanings (e.g., *biological diversity*, *wildlife*, *connectivity*). Clarify how you use such terms, and define specialized terms at first use in the Abstract and in the body of the paper.

### Abbreviations and acronyms

Do not begin a sentence with an abbreviation. Use abbreviations sparingly. Define all abbreviations, initializations, and acronyms at first use. For example: analysis of variance (ANOVA), International Union for Conservation of Nature (IUCN).

### Capitalization

Geographic designations: Do not capitalize a term that indicates region unless it is being used as a proper noun (e.g., western states, Southeast Asia). Capitalization of terms used commonly in *Conservation Biology*: the Tropic of Cancer, the tropics; North Temperate Zone, temperate zone; East Africa, North Africa, central Africa; central Asia; tropics, Neotropics; Amazon Basin; Central Honshu Lowland Forest (an endemic bird area); Cape Floristic Region (a hotspot of biological diversity); Atlantic Forest, taiga.

Threat categories: Do not capitalize threat categories used by institutions or authoritative bodies: threatened, endangered, critically endangered, conservation concern, etc.

Do not capitalize names assigned to variables or scenarios, for example, pool, release, forced renesting, release location.



### **Active voice**

In general, use *we* or *I* (i.e., active voice). For example: “We converted all GIS data to raster format.” rather than “All GIS data were converted to raster format.” Or, “Trained technicians surveyed the plots.” rather than “The plots were surveyed by trained technicians.” In particular, Methods should not be written entirely in passive voice.

### **Tense**

Use past tense in the Methods (describing what you did), Results (describing what your results were), and in the Discussion (referring to your results). Use present tense when you refer to published results. The principal exception to this rule is in the area of attribution and presentation. It is correct to say, for example, “Toffel (2008) found [past] that extracts from iron weed inhibit [present] fungal growth.” Report model results in past tense.

### **Spelling**

Use U.S. rather than British spelling.

### **Commas**

Use a serial comma.

### **Word usage**

*Using*: In scientific writing, the word *using* is often the cause of dangling participles and misplaced modifiers.

Examples: “Using tissue-isolation protocol, mtDNA was isolated from dried skins.” Who is doing the *using* is unclear. Better: “We used tissue-isolation protocol to isolate mtDNA from dried skins.”

“Ivory samples were taken from tusks using a 16-mm drill bit on a 40-cm drill.” This implies that the tusks used the drill. Better: “We used a 16-mm drill bit on a 40-cm drill to take ivory samples from tusks.”

*Impact*: Use *affected*, not *impacted*.

*With*: A *with* phrase at the end of sentences often creates a dangling phrase. For example, “Many researchers calculated extent of occurrence by summing the area of all polygons in the species extant distribution map, with these polygons excluding areas in the geographic distribution of a species that were not habitat.” A possible revision that fixes the dangling phrase is “...distribution map; these polygons excluded areas in the geographic distribution of a species that were not habitat.”

*Compared with*: Use *compared with* or *relative to* rather than *compared to*. The circumstances in which *compared to* is correct are rare (2 unlike things being compared; e.g., “Shall I compare thee to a summer’s day.”)

*Habitat*: Consider that habitat is a species-specific construct and habitat by definition is suitable.

### **Multiple modifiers**

Do not use multiple adjectival nouns to modify a noun that is the subject or the object of the sentence: “We studied illegal African elephant ivory trade.” or “infected bird populations’ responses.” Better: “We studied illegal trade in African elephant ivory.” and “responses of infected bird populations.”

### **Split infinitives**

A sentence should not sound awkward because it has been rearranged to avoid a split infinitive. When an adverb qualifies a verb phrase, the adverb usually should be placed between the auxiliary verb and the principal verb (e.g., this research will soon attract attention). Splitting an infinitive verb with an adverb can be useful for adding emphasis or making a sentence sound less stilted. Phrases such as the following are acceptable: the traps had been seriously damaged in a storm; differences in abundance were highly significant; to strongly favor.

### **Pronouns**

Be careful with the pronouns *this*, *these*, and *it*. If you do not provide a qualifier, it is sometimes difficult to tell what these words refer to: “This program offers solutions to that problem.” Better: “This computer program offers solutions to the problem of incorrect sequencing of numbers.” Use formal language. This means use of *one* rather than *you*, and when using personal pronouns *we* and *our* they should refer to you as the author rather than to people or conservation scientists in general.

### **Quotation marks**

Quotation marks (single or double) should not be used to imply a word is being used in a unique way. Use double quotation marks only when quoting directly what someone wrote or said. Use single quotation marks around quoted text within quoted text (James Howard said, “We rely on Seneca’s inspirational words, ‘The best ideas are common property’ in our approach to technological development.”).

## **Numbers, Variables, and Statistical Elements**

Numeral versus word: We follow *Scientific Style and Format*, 7th edition. Most numbers in most circumstances, even those under 10, appear as numerals (i.e., they are not spelled out). The numbers 0 and 1 present exceptions; copyeditors will address these.

Longitude and latitude: 148°N, 78°W (no periods).

Percentages and degrees: use symbols (15% and 15°).

Fractions: spell out (one-half, one-third) unless used with units of measure (0.5 mm or 0.5 years).

Decimal point: insert 0 before a decimal point (0.4, not .4).

Significant figures: Express calculated values (e.g., means, standard deviation) to not more than one significant digit beyond the accuracy of the original measurement. Report test statistics (e.g., *p* values, correlation coefficients) to not more than 3 significant digits.

SD and SE: mean (SD)=44% (3) or mean of 44% (SD 3)

Dates: day, month, year (e.g., 6 October 1987). Do not use abbreviations such as 5/3/14 or 5-3-14.

Numbered lists: do not use numbered lists in the text. “We used x, y, and z to take soil samples” rather than “We used 3 techniques to take soil samples: (1) . . . , (2) . . . , and (3) . . .”

Insert a space between numbers and the unit of measure (6 m, 14 mL).

Delimiters: in mathematical expressions the order of delimiters (i.e., fences) is braces { }, brackets [ ], and parentheses ( ): {{( )}}. In narrative text, the order is the opposite, ([ ]). In functional notation, nested pairs of parentheses are used.

Define all variables used in an equation.

Italicize all single-letter variables in equations. Do not italicize variables with more than 1 letter (e.g., “RU” meaning reproductive units as opposed to *RU*, in which *R* and *U* are separate interacting variables) or words used in association with variables (e.g.,  $x_{\text{forest}}$ ).

Complete words used as a variable should be lowercase (e.g., species). Each letter in multiple-letter abbreviations that are not complete words should be capitalized (e.g., AMF is acceptable for area of managed forest; PATCH for patch area is unacceptable).

Use the following abbreviations:

*p*, probability

df, degrees of freedom

$\chi^2$ , chi-square

*F* (*F* test, variance ratio)

*F<sub>ST</sub>* (fraction of total genetic variance among subpopulations)

CI, confidence interval or credible interval

SE, standard error (do not use  $\pm$ )

SD, standard deviation (do not use  $\pm$ ).

## Scientific Names

English and scientific names of birds should follow the checklist of the International Ornithological Congress (<http://worldbirdnames.org/names.html>). Deviations from spellings in this checklist must be supported by an explicit citation of the nomenclatural source (i.e., a published regional checklist or book on the birds of a specific area).

Common names of taxonomic groups other than birds should be in lower case (creeping thistle, common bushtail possum, gopher tortoise).

In the abstract and at first mention in the text, use common name followed by scientific name (genus and species) in parentheses: cane toad (*Bufo marinus*), Douglas-fir (*Pseudotsuga*)

*menziesii*), Florida Scrub Jay (*Aphelocoma coerulescens*). With a few exceptions, after scientific name has been provided use common name.

Organisms: *Clarkia springvillensis* (first use); *C. springvillensis* (thereafter, even starting a sentence); spp. or sp. or var. (no italics).

### ***Conservation Biology Style Sources***

- Day, R. A., and B. Gastel. 2011. How to write and publish a scientific paper. 7th edition. Greenwood, Santa Barbara, California.
- Council of Science Editors. 2006. Scientific style and format. 7<sup>th</sup> edition. Council of Science Editors, Reston, Virginia.
- Merriam-Webster. 2003. Third new international dictionary, unabridged. Merriam-Webster, Springfield, Massachusetts.
- University of Chicago Press. 2010. The Chicago manual of style. 16<sup>th</sup> edition. University of Chicago Press, Chicago.

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